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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/922,700	08/07/2001	Gary Martin Oosta		8785

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Keith B Scala  
1731 Willard Street N W Suite 502  
Washington, DC 20009

EXAMINER

TRUONG, CAM Y T

ART UNIT	PAPER NUMBER
	2162

DATE MAILED: 12/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/922,700	OOSTA, GARY MARTIN
Examiner	Art Unit	
Cam Y T Truong	2172	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on 05 March 2004.
- 2a) This action is FINAL.      2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 25-59 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) 25, 28-33 and 36-38 is/are allowed.
- 6) Claim(s) 26, 27, 34-35, 39-59 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) All b) Some \* c) None of:  
1. Certified copies of the priority documents have been received.  
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) The translation of the foreign language provisional application has been received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____	6) <input type="checkbox"/> Other: _____

## DETAILED ACTION

1. Applicant has canceled claims 1-24 and added claims 25-59 in the amendment filed on 5/3/04. Claims 25-59 are pending in this office Action.

Applicant's arguments with respect to claims 25-59 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 39 recites the limitation "the sum" in claim 39 line 11. There is insufficient antecedent basis for this limitation in the claim.

4. Claims 40-49 are dependent on claim 39 respectively and therefore these claims are also rejected on that basis.

5. The language of claims 26, 27, 34, 35, 40, 41, 46, 51 and 56 appear to be an attempting to employ the Markush style of claiming alternative limitation. The term "comprising" is not proper when used in Markush style claiming. MPEP 2173.05(h).

Claims 36-37 are dependent on claim 35 respectively and therefore these claims are also rejected on that basis.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 39, 43, 44, 48 and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wical (US 5953718) in view of Keith (US 6629097).

As to claim 39, Wical teaches the claimed limitations:

“selecting a set of documents for analysis” as identifying the themes for a document and classifies the documents. This information indicates that the system has selected documents for classifying or analysis (col. 2, lines 45-47);

“preparing for electronic analysis of the documents by incorporating selected document sections into a database compatible format” as the content processing system 110 analyzes paragraphs in the document to identify paragraph themes for each paragraph (col. 5, lines 59-60);

“selecting at least one document section” as when the system selects a document, the system select documents sections (col. 7, lines 54-60);

“forming a technology topics collection comprising sets of words or phrases for each technology topic using expert knowledge” as concept search knowledge search list topics. These topics include sets of words or phrase (fig. 8A, col. 20, lines 20-35);

“multiplying the sum by a weighting factor” as multiplying the total query weight by the factor of 1000 (col. 11, lines 23-26);

"assigning each document in the collection to a technology topic" as each topic contains a list of document (col. 20, lines 20-35).

Wical does not explicitly teach the claimed limitation "counting the number of words from each technology topic that exist in each document of the document collection and "forming a standard picture of technology evolution by plotting individual documents on a graph with selected technology topic along one axis and a date along another axis".

Keith teaches that the number of appearances of the word in the document and case law textual objects are organized in a conceptual space in which degree of similarity is represented on a vertical Y axis and publication data is presented on horizontal axis X (col. 7, lines 34-40; col. 9, lines 40-55).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply Keith's teaching of the number of appearances of the word in the document and case law textual objects are organized in a conceptual space in which degree of similarity is represented on a vertical Y axis and publication date is presented on horizontal axis X to Wical's system in order to classify documents correctly, to calculate similarity between documents and save time for a user viewing a document by following displayed graph of date axis.

As to claim 43, Wical and Keith disclose the claimed limitation subject matter in claim 39, Keith further teaches the claimed limitation "wherein the documents are displayed on an x-y plot" as (col. 9, lines 40-55).

As to claim 44, Wical and Keith disclose the claimed limitation subject matter in claim 39, Keith further teaches the claimed limitation "wherein the x-axis of the x-y plot is time-based" as (col. 9, lines 40-55).

As to claim 48, Wical and Keith disclose the claimed limitation subject matter in claim 39, Keith further teaches the claimed limitation "wherein a document displayed on the x-y plot can be highlighted to show documents containing selected word" as (col. 9, lines 40-55).

A to claim 49, Wical and Keith disclose the claimed limitation subject matter in claim 39, Keith further teaches the claimed limitation "wherein the documents are displayed in a multi-dimensional plot" as (col. 9, lines 40-50).

8. Claim 42 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wical (US 5953718) in view of Keith (US 6629097) and further in view of Niwa et al (or hereinafter "Niwa") (US 5987460).

As to claim 42, Wical does not explicitly teach the claimed limitation "wherein the document are assigned to a technology topic group using a weighting factor which emphasizes the contribution of less frequently occurring words in a technology topic". Niwa teaches a word with a lower frequency (col. 9, lines 64-67).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Niwa's teaching of a word with a lower frequency to Wical and Keith's system in order to provide a topic word as a keyword for searching quickly.

9. Claims 40, 41, 45-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wical (US 5953718) in view of Keith (US 6629097) and further in view of Rivette.

As to claim 40, Wical and Keith disclose the claimed limitation subject matter in claim 39, except the claimed limitation "wherein the collection of documents is chosen from one or more of the group comprising patents, scientific papers, trade journal articles, newspaper articles, press release, web pages and magazines articles". Rivette teaches patent databases, financial database, Non-patent database (col. 8, lines 15-65).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Rivette's teaching of patent databases, financial database, Non-patent database to Wical's system and Keith's system in order to allow a user can search/retrieve different kind of document.

As to claim 41, Wical and Keith disclose the claimed limitation subject matter in claim 39, except the claimed limitation "the document section is chosen from one or more of the group comprising document titles, headlines, abstracts, bodies, methods,

examples, summaries, results and claims". Rivette teaches that a document includes title, abstracts, body, claims (fig. 118).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Rivette's teaching of a document includes title, abstracts, body, claims to Wical's system and Keith's system in order to allow a user to search on an particular section quickly.

As to claim 45, Wical and Keith disclose the claimed limitation subject matter in claim 39, except the claimed limitation "wherein the time base of the x-y plot is chosen from the group consisting of the publication date, filing date, issue date and priority date". Rivette teaches publication date, filling date, issue date and priority date (figs. 124& 125).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Rivette's teaching of publication date, filling date, issue date and priority date to Wical and Keith to allow a user to search/retrieve documents based on dates of documents quickly.

As to claim 46, Wical and Keith disclose the claimed limitation subject matter in claim 39, except the claimed limitation "wherein documents within a technology topic are further arrayed in one or more groups selected from organizations, companies, assignees, individuals and authors". Rivette teaches organizations, companies, assignees, individuals and authors (figs 12K-19).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Rivette's teaching of organizations, companies, assignees, individuals and authors to Wical and Keith to help a user to search/retrieve any section of a document easily.

As to claim 47, Wical and Keith disclose the claimed limitation subject matter in claim 39, except the claimed limitation "wherein the documents in a technology topic are sorted based on the total number of documents within the technology topic". Rivette teaches sorting document in (fig. 3).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Rivette's teaching of sorting documents to Wical and Keith' system in order to save time for a user to read documents.

10. Claims 50, 52-54 and 58-59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wical (US 5953718) in view of Keith (US 6629097) and the admitted of the prior art.

As to claim 50, Wical teaches the claimed limitation "selecting a set of patents for analysis and selecting a collection of reference" as selecting document and themes as references (col. 2, lines 20-40); "preparing for electronic analysis of the patents by incorporating selected patents into a database compatible format" as the content processing system 110 analyzes

paragraphs in the document to identify paragraph themes for each paragraph (col. 5, lines 59-60);

“classifying reference into predetermined categories” as classifying document themes into predetermined categories (col. 7, lines 15-25);

“identifying scientific, journal or technical references by searching for the journal name using a preformatted list” as (col. 22, lines 20-45);

“forming artificial reference in a standard format by comparing technical and journal references to a preformatted list” as (col. 22, lines 10-30; fig. 5).

Wical does not explicitly teach the claimed limitation “forming co-citation clusters using artificial journal references to reveal the structure of the underlying science; assigning patents from the selected patent to co-citation clusters to form a technology topic; and forming a standard picture of technology evolution by plotting individual documents on a graph with technology topics along one axis and a date along another axis”.

The admitted of the prior art teaches co-citing analysis and clustering (page 2, col. Right, lines 55-62, col. Left, lines 6-7). Keith teaches that the number of appearances of the word in the document and case law textual objects are organized in a conceptual space in which degree of similarity is represented on a vertical Y axis and publication date is presented on horizontal axis X (col. 7, lines 34-40; col. 9, lines 40-55).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply the admitted of prior art’s teaching of co-citing analysis

and clustering and Keith's teaching of the number of appearances of the word in the document and case law textual objects are organized in a conceptual space in which degree of similarity is represented on a vertical Y axis and publication date is presented on horizontal axis X to Wical's system in order to classify documents correctly, to calculate similarity between documents and save time for a user viewing a document by following displayed graph of date axis.

As to claims 52 and 53, Wical does not explicitly teach the claimed limitation. Keith teaches "wherein the documents are displayed on an x-y plot" as (col. 9, lines 40-55).

As to claim 54, Wical does not explicitly teach the claimed limitation. Keith teaches "wherein the x-axis of the x-y plot is time-based" as (col. 9, lines 40-55).

As to claim 58, Wical teaches the claimed limitation "wherein a document displayed on the x-y plot can be highlighted to show documents containing selected word" as (col. 9, lines 40-55).

As to claim 59, Wical teaches the claimed limitations: "selecting a set of documents for analysis" as (col. 59, lines 25-55); "preparing for electronic analysis of the documents by incorporating selected patents into a database compatible format" as (col. 59, lines 25-55; col. 61, lines 40-65);

"selecting at least one document section" as (fig. 53 &118);

"assigning patents to technology topics" as (col. 84, lines 40-50).

Wical does not explicitly teach the claimed limitation "forming technology topics using a combination of co-word and co-citation analysis; forming a standard picture of technology evolution by plotting individual documents on a graph with technology topics along axis and a date along another axis".

The admitted of prior art teaches co-word analysis document and co-citation analysis (page 2, col. Right, lines 655-62, col. Left, lines 6-7). Keith teaches that the number of appearances of the word in the document and case law textual objects are organized in a conceptual space in which degree of similarity is represented on a vertical Y axis and publication date is presented on horizontal axis X (col. 7, lines 34-40; col. 9, lines 40-55).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply the admitted of prior art's teaching of co-citing analysis and clustering and Keith's teaching of the number of appearances of the word in the document and case law textual objects are organized in a conceptual space in which degree of similarity is represented on a vertical Y axis and publication date is presented on horizontal axis X to Wical's system in order to classify documents correctly, to calculate similarity between documents and save time for a user viewing a document by following displayed graph of date axis.

11. Claims 51, 55, 56 and 57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wical (US 5953718) in view of Keith (US 6629097) and the admitted of the prior and further in view of Rivette.

As to claim 51, Wical does not explicitly teach the claimed limitation "patents, scientific papers, trade journal articles, newspaper articles, books, newspaper articles, government publications, materials safety data sheets, product brochures, press release, web pages and magazines articles". Rivette teaches patent databases, financial database, Non-patent database (col. 8, lines 15-65).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Rivette's teaching of patent databases, financial database, Non-patent database to Wical's system, Keith's system, the admitted of the prior art in order to allow a user can search/retrieve different kind of document (col. 8, lines 15-65).

As to claim 55, Wical, Keith, the admitted of the prior art disclose the claimed limitation subject matter in claim 53, except the claimed limitation "wherein the time base of the x-y plot is chosen from the group consisting of the publication date, filing date, issue date and priority date". Rivette teaches publication date, filling date, issue date, priority date (figs. 124& 125).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Rivette's teaching of publication date, filling date, issue date, priority date to Wical, Keith and the admitted of the prior art in order to provide

details about a patent that allow a examiner to use to reject another non-patent for issuing a patent.

As to claim 56, Wical, Keith, the admitted of the prior art disclose the claimed limitation subject matter in claim 50, except the claimed limitation "wherein documents within a technology topic are further arrayed in one or more groups selected from organizations, companies, assignees, individuals and authors". Rivette teaches organizations, companies, assignees, individuals and authors (figs 12K-19).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Rivette's teaching of organizations, companies, assignees, individuals and authors to Wical, Keith, and the admitted of the prior art to help a user to search/retrieve any section of a document easily.

As to claim 57, Wical, Keith, the admitted of the prior art disclose the claimed limitation subject matter in claim 50, except the claimed limitation "wherein the documents in a technology topic are sorted based on the total number of documents within the technology topic" Rivette teaches sorting document in (fig. 3).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Rivette's teaching of sorting documents to Wical, Keith and admitted of the prior art in order to save time for a user to read documents.

***Allowable Subject Matter***

12. Claims 25, 28-33, and 36-38 are allowed.

The prior art of record, alone or in combination, does not teach or fairly suggest the combination of steps as recited in independent claim 25, wherein "forming a first technology topics collection by selecting word pairs with frequency counts above the first frequency count threshold for each column in the first word correlation matrix; forming an additional word correlation matrix from the words in the collection of the first technology topics; forming an addition technology topics collection by associating word pairs from one or more technology topics".

Claims 28-33 and 36-38 are dependent on claim 25. Thus, they are allowed.

### ***Conclusion***

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The EMPSL Standard, August/September 1998 (pages 1-5).

Neev, Joseph et al, Patents, 1998 (pages 1-4).

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

***Contact Information***

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cam Y T Truong whose telephone number is. (571) 272-4042. The examiner can normally be reached on Monday to Firday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached on (571) 272-4107. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Cam-Y Truong  
Patent Examiner  
Art Unit 2162  
12/2/2004

  
JOHN BREENE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100